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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,313	03/29/2001	Nagayuki Takao	0152-0555P	1864

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 07/16/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,313

Applicant(s)

TAKAO ET AL.

Examiner

Callie E. Shosho

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-4, 8-9, 13-15, and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Ikeda et al. (U.S. 5,952,429).

The rejection is adequately set forth in paragraph 3 of the office action mailed 1/29/03, Paper No. 9, and is incorporated here by reference.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-4, 6-11, 13-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubuko et al. (U.S. 5,952,048) in view of Ryntz et al. et al. (U.S. 4,673,718).

The rejection is adequately set forth in paragraph 5 of the office action mailed 1/29/03, Paper No. 9, and is incorporated here by reference.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubuko et al. in view of Ryntz et al. et al. as applied to claims 1-4, 6-11, 13-20, and 22 above, and further in view of Zahrobsky et al. (U.S. 5,936,027).

The rejection is adequately set forth in paragraph 6 of the office action mailed 1/29/03, Paper No. 9, and is incorporated here by reference.

6. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al. (U.S. 5,952,429).

The rejection is adequately set forth in paragraph 7 of the office action mailed 1/29/03, Paper No. 9, and is incorporated here by reference.

Response to Arguments

7. Applicants' arguments filed 4/29/03 have been fully considered but they are not persuasive.

Specifically, applicants argue that:

(a) Ikeda et al. is not a relevant reference against the present claims given that the present claims require that the silicone graft polymer is adsorbed on the pigment while Ikeda et al. disclose silicone graft polymer which reacts with functional group on the surface of the pigment.

(b) Tsubuko et al. is not a relevant reference against the present claims given that the ink of Tsubuko et al. contains charged particles which are not required in the present claims.

(c) Ryntz et al. is non-analogous art.

With respect to argument (a), it is noted that page 9, line 24-page 10, line 11 of the present specification disclose that adsorption as presently claimed occurs by chemical bonding such as bonding between amino group introduced into surface of pigment and carboxyl group introduced into silicone graft copolymer. Given that Ikeda et al. disclose the exact same situation, i.e. silicone graft polymer is bonded to pigment by reaction between functional group on surface of the pigment and reactive group present on the silicone graft copolymer, it is examiner's position that Ikeda et al. do disclose silicone graft polymer adsorbed onto pigment as presently claimed. Thus, it is not clear why applicants' argue that Ikeda et al. do not disclose adsorption as presently claimed. Clarification is requested.

With respect argument (b), while it is agreed that there is no requirement in the present claims that the ink comprises charged particles, there is nothing in the scope of the present claims to exclude such charged particles. That is, the present claims require ink which contains 100 parts pigment and 50-10000 parts organic solvent which has small polarity and specific resistivity as well as silicone graft polymer which is adsorbed to the pigment. Given that Tsubuko et al. (in combination with Ryntz et al.) disclose such ink, it is clear that Tsubuko et al. meets the limitations of the present claims even though Tsubuko et al. disclose the use of charged particles. The present claims are open to both charged and uncharged particles.

Further, it is noted that Tsubuko et al. disclose ink which is charged and then ejected from the printer (col.4, lines 11-20). Given that the present claims are drawn to ink composition not method of using the ink, there is nothing in the present claims which excludes the ink from being electrically charged. That is, the present claims are drawn to an ink which is disclosed by

Tsubuko et al. There is nothing in the claims which prevents what is subsequently done to the ink.

With respect to argument (c), applicants argue that Ryntz et al. is not a relevant reference against the present claims given that Ryntz et al. is drawn to silicone graft polymer which produces coatings with superior weathering properties and excellent adhesion to metal and plastic which makes them well suited for use as coatings on, for instance, motor vehicles.

However, applicants' are reminded that according to MPEP 2141.01 (a), a reference may be relied on as a basis for rejection of an applicants' invention if it is "reasonably pertinent to the particular problem with which the inventor is concerned." A reasonably pertinent reference is further described as one which "even though it maybe in a different field of endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." Ryntz et al. is, therefore, a reasonably pertinent reference, because it teaches that silicone graft polymer identical to that presently claimed producing coating with superior weatherability and good adhesion to metal and plastic, which is a function especially pertinent to the invention at hand given that it is important that the ink, i.e. coating, adhere to substrate and not fade or deteriorate over time. Further, it is the examiner's position that the combination of Tsubuko et al. with Ryntz et al. is particularly relevant given that Tsubuko et al. disclose ink comprising silicone polymer adsorbed to pigment wherein the ink is printed on metal or plastic and Ryntz et al. disclose that the motivation to use specific silicone graft polymer is to produce coating with good adhesion to metal or plastic.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

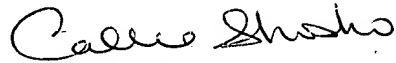
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Callie E. Shosho
Primary Examiner
Art Unit 1714

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July 11, 2003